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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,703	02/24/2004	Sang-Hyuk Im	IK-0076	1474
34610	7590	03/20/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			VU, MICHAEL T	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/784,703	Applicant(s) IM ET AL.	
	Examiner Michael Vu	Art Unit 2683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14, 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lonka (US 6,961,593).

Regarding **claims 1, 8, 10, 19 and 22**, Lonka teaches a slide type portable terminal (Fig. 6a and Fig. 6b), comprising: a main unit that includes separated first and second key sections exposed in a surface of the main unit (Fig. 6a and Fig. 6b, the held-hand communication electronic apparatus 600 shows separated first (element 601/upper part, and second key sections exposed element 602/lower part); and a display unit that includes a display screen exposed to a front surface of the display unit (display screen, element 606), wherein the display unit is configured to slide relative to the surface of the main unit to cause the first and second key sections of the main unit to be selectively exposed (Fig. 6a and Fig. 6b), wherein the display unit can be

selectively slid to a first position where both the first and second key sections of the main unit are exposed (Fig. 6a and Fig. 6b), a second position where only one of the key sections is exposed **but is silent on** and a third position where both the first and second key sections are not exposed.

However, Lonka further teaches the first, second and the third position of the mobile device (see Fig. 3 Prior Art #300, shows 2<sup>nd</sup> and 3<sup>rd</sup> position) and further teaches (see Fig. 5b Prior Art shows when it closed the element #501 and element #502 equals to the third position are not exposed).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lonka, such that a third position where both the first and second key sections are not exposed, to prevent an inadvertent keys/buttons depression.

Regarding **claim 2**, Lonka teaches a slide type portable terminal of claim 1, comprising a stopper mechanism configured to allow the display unit to be stopped at the second position where said only one of the key sections is exposed (Fig. 6a- 6b, C5, L32-67 to C6, L1-38) of Lonka.

Regarding **claims 3, 13 and 17**, Lonka teaches a slide type portable terminal of claim 2, wherein the stopper mechanism includes a stopper groove affixed to one of the display unit and the main unit, and a stopper spring coupled to the other one of the units to correspond to the stopper groove, wherein the stopper spring is selectively seated in the stopper groove (Fig. 6a- 6b, and Fig. 7-8, C3, L34-46, C5, L32-67 to C6, L1-38) of Lonka.

Regarding **claim 4**, Lonka teaches a slide type portable terminal of claim 1, wherein first and second magnets are correspondingly arranged on the main unit and the display unit, respectively, so that the same poles of the magnets face each other to provide a repulsive force when they are positioned to face close to each other (C7, L1-28 and Fig. 6b) of Lonka.

Regarding **claims 5 and 9**, Lonka teaches a slide type portable terminal of claim 4, wherein corresponding sliding structures configured to perform sliding operations of the main unit and the display unit are provided on opposite lateral ends of the main unit and the display unit (Fig. 6a- 6b, Fig. 7-8, C3, L34-46, C4, L52-67 to C5, L1-32) of Lonka.

Regarding **claim 6**, Lonka teaches a slide type portable terminal of claim 1, wherein the separated first and second key sections are a number key section and a function key section that includes a microphone respectively (Fig. 6a- 6b, element Microphone 611) of Lonka.

Regarding **claim 7**, Lonka teaches a slide type portable terminal of claim 6, comprising a third separate input section being function buttons on an upper surface of the display unit (Fig. 6a- 6b, element 608 buttons/keys) of Lonka.

Regarding **claim 11**, Lonka teaches a slide type portable terminal of claim 10, further teaches wherein the display unit can be selectively slid to a first position where both the first and second key sections of the main unit are exposed, a second position where only one of the key sections is exposed, and a third position where both the first and second key sections are covered (Fig. 6a- 6b, C4, L15-67) of Lonka.

Regarding **claim 12**, Lonka teaches a slide type portable terminal of claim 11, further teaches wherein the first and second magnets cross over each other during movement between the first and second positions (Fig. 6a- 6b) of Lonka.

Regarding **claim 14**, Lonka teaches a slide type portable terminal of claim 11, further teaches wherein the first and second magnets cross over each other during movement between the second and third positions (Fig. 6a-6b, (Fig. 6a- 6b, C4, L15-67) of Lonka.

Regarding **claim 16**, Lonka teaches a slide type portable terminal of claim 10, further teaches comprising a stopper mechanism configured to temporarily fix the display unit to be stopped at a position where one of the key sections is exposed (Fig. 6a-6b, C5, L32-67 to C6, L1-38) of Lonka.

Regarding **claim 18**, Lonka teaches a slide type portable terminal of claim 10, comprising a third separate key section being function keys on an upper surface of the display unit, wherein the separated first and second key sections are a number key section and a multi-media key section that includes a microphone, respectively (Fig. 6a and 6b) of Lonka.

Regarding **claim 20**, Lonka teaches a method of claim 19, wherein magnetic force assists movement between the first and second positions and between the second and third positions (Fig. 6a and 6b, C5, L32-67 to C6, L1-38) of Lonka.

Regarding **claim 21**, Lonka teaches a method of claim 20, comprising providing a resistive locking member between the display unit and the main unit, wherein the resistive locking member has an engaging member and an engagement member that

retractably engage at least when the display unit is in the second position (Fig. 6a and 6b, C3, L33-47, C4, L52-67 to C5, L1-32) of Lonka.

3. Claim 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lonka in view of King (US 2004/0067768).

Regarding **claim 15**, Lee teaches a slide type portable terminal of claim 10, **but is silent on** comprising a touch screen input device removably attached to the portable terminal, wherein the display screen is a touch screen.

However, King teaches a touch screen element positioned on a first body portion; a plurality of user interface actuator keys positioned on the first body portion below the touch screen element; and a display responsive to the touch screen user interface and positioned on a second body portion, the second body portion being movable between a closed position and an open position (Abstract, Fig. 5 to Fig. 36, [0097, 0099]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lonka, such that a touch screen input device removably attached to the portable terminal, wherein the display screen is a touch screen, to provide a multipurpose of such as convenient/ fast/ to save time for users to operate it.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Norman US 6,073,027

Bae US 2004/0203496

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131.

The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

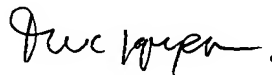


Art Unit: 2683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael T. Vu

  
**DUC NGUYEN**  
**PRIMARY EXAMINER**  
*Supervisory*